

fragment which has phospholipase B activity.

72 101. The nucleic acid sequence of claim 100, which encodes a polypeptide having an amino acid sequence which has at least 80% identity with amino acids 20 to 464 of SEQ ID NO:2.

73 102. The nucleic acid sequence of claim 101, which encodes a polypeptide having an amino acid sequence which has at least 90% identity with amino acids 20 to 464 of SEQ ID NO:2.

74 103. The nucleic acid sequence of claim 102, which encodes a polypeptide having an amino acid sequence which has at least 95% identity with amino acids 20 to 464 of SEQ ID NO:2.

C1 75 104. The nucleic acid sequence of claim 103, which encodes a polypeptide having an amino acid sequence which has at least 97% identity with amino acids 20 to 464 of SEQ ID NO:2.

76 105. The nucleic acid sequence of claim 100, which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

77 106. The nucleic acid sequence of claim 100, which encodes a polypeptide consisting of the amino acid sequence of SEQ ID NO:2, or a fragment thereof which has phospholipase B activity.

78 107. The nucleic acid sequence of claim 106, which encodes a polypeptide consisting of amino acids 20 to 464 of SEQ ID NO:2.

79 108. The nucleic acid sequence of claim 100, which has at least 80% homology with nucleotides 568 to 2045 of SEQ ID NO:1.

80 109. The nucleic acid sequence of claim 108, which has at least 90% homology with nucleotides 568 to 2045 of SEQ ID NO:1.

81 110. The nucleic acid sequence of claim 109, which has at least 95% homology with nucleotides 568 to 2045 of SEQ ID NO:1.

82 111. The nucleic acid sequence of claim 110, which has at least 97% homology with nucleotides

568 to 2045 of SEQ ID NO:1.

83 112. The nucleic acid sequence of claim 100, which has the nucleic acid sequence of SEQ ID NO:1.

84 113. The nucleic acid sequence of claim 100, which hybridizes under medium stringency conditions with (i) nucleotides 568 to 2045 of SEQ ID NO:1, (ii) the cDNA sequence contained in nucleotides 568 to 2045 of SEQ ID NO:1, or (iii) a complementary strand of (i) or (ii).

85 114. The nucleic acid sequence of claim 113, which hybridizes under medium-high stringency conditions with (i) nucleotides 568 to 2045 of SEQ ID NO:1, (ii) the cDNA sequence contained in nucleotides 568 to 2045 of SEQ ID NO:1, or (iii) a complementary strand of (i) or (ii).

C 1 86 115. The nucleic acid sequence of claim 114, which hybridizes under high stringency conditions with (i) nucleotides 568 to 2045 of SEQ ID NO:1, (ii) the cDNA sequence contained in nucleotides 568 to 2045 of SEQ ID NO:1, or (iii) a complementary strand of (i) or (ii).

87 116. The nucleic acid sequence of claim 100, contained in *E. coli* pPH6 as deposited with NRRL under accession number B-30142.

88 117. An isolated nucleic acid sequence encoding a polypeptide having phospholipase B activity, said nucleic acid sequence obtained by (a) identifying a clone containing a nucleic acid sequence which hybridizes under medium stringency conditions with (i) nucleotides 568 to 2045 of SEQ ID NO. 1, (ii) the cDNA sequence contained in nucleotides 568 to 2045 of SEQ ID NO. 1, or (iii) a complementary strand of (i) or (ii); and (b) isolating the nucleic acid sequence encoding a polypeptide having phospholipase B activity from the clone.

89 118. The isolated nucleic acid sequence of claim 117 obtained by (a) identifying a clone containing a nucleic acid sequence which hybridizes under medium-high stringency conditions with (i) nucleotides 568 to 2045 of SEQ ID NO. 1, (ii) the cDNA sequence contained in nucleotides 568 to 2045 of SEQ ID NO. 1, or (iii) a complementary strand of (i) or (ii); and (b) isolating the nucleic acid sequence encoding a polypeptide having phospholipase B activity from the clone.

90 119. The nucleic acid sequence of claim 118 obtained by (a) identifying a clone containing a nucleic

acid sequence which hybridizes under high stringency conditions with (i) nucleotides 568 to 2045 of SEQ ID NO. 1, (ii) the cDNA sequence contained in nucleotides 568 to 2045 of SEQ ID NO. 1, or (iii) a complementary strand of (i) or (ii); and (b) isolating the nucleic acid sequence encoding a polypeptide having phospholipase B activity from the clone.

91 120. A nucleic acid construct comprising the nucleic acid sequence of claim 100 operably linked to one or more control sequences which direct the production of the polypeptide in a suitable expression host.

92 121. A recombinant expression vector comprising the nucleic acid construct of claim 120.

93 122. A recombinant host cell comprising the nucleic acid construct of claim 120.

C<sup>1</sup> 94 123. A method for producing a polypeptide having phospholipase B activity comprising (a) cultivating a strain comprising the nucleic acid sequence of claim 100 under conditions suitable for producing the polypeptide; and (b) recovering the polypeptide.

95 124. A method for producing a polypeptide having phospholipase B activity comprising (a) cultivating the recombinant host cell of claim 122 under conditions suitable for production of the polypeptide; and (b) recovering the polypeptide.

96 125. A nucleic acid construct comprising a gene encoding a protein operably linked to a nucleic acid sequence encoding a signal peptide consisting of nucleotides 510 to 567 of SEQ ID NO. 1, wherein the gene is foreign to the nucleic acid sequence.

97 126. A recombinant expression vector comprising the nucleic acid construct of claim 125.

98 127. A recombinant host cell comprising the nucleic acid construct of claim 125.

99 128. A method for producing a protein comprising (a) cultivating the recombinant host cell of claim 127 under conditions suitable for production of the protein; and (b) recovering the protein.

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